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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,659	10/24/2003	Jeffrey P. Snover	MS1-1741US	9647
22801	7590	11/12/2008		
LEE & HAYES PLLC 601 W Riverside Avenue Suite 1400 SPOKANE, WA 99201			EXAMINER ABEL JALIL, NEVEEN	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 11/12/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/693,659	Applicant(s) SNOVER ET AL.	
	Examiner NEVEEN ABEL JALIL	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, and 13-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), w, and as filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27-August-2008 has been entered.
2. The response filed on 27-August-2008 has been received and considered. Claims 1-11 and 13-23 are pending.
3. Applicant's response has overcome the previous claim objections and rejections.

Terminal Disclaimer

4. The terminal disclaimers filed on August 27, 2008 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Application No. 10/438,235 and 10/693,589 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Specification

5. The disclosure is objected to because of the following informalities: On page 16 the US Patent Applications No. is missing for referenced examples.

Appropriate correction is required.

Claim Objections

6. Claims 2, 3 and 20 are objected to because of the following informalities:

Claims 2, 3, and 20 recite the limitation "the executing act" in line 1. There is insufficient antecedent basis for this limitation in the claim. The recitation should be replaced to "the executing". Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-11, and 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray et al. (U.S. Pub. No. 2006/0235968 A1) in view of Young (U.S. Patent No. 6,782,531 B2) and further in view of Kirens (U.S. Patent No. 5,864,862)

As to claims 1, and 19, Murray et al. discloses a system that extends data types available to an operating environment, the system comprising:

a processor (See Murray et al. page 3, paragraph 0024); and

a memory, the memory being allocated for a plurality of computer-executable instructions which are loaded into the memory (See Murray et al. page 3, paragraph 0024) for execution by the processor, the computer-executable instructions comprising:

parsing a sequence of object-based commands into individual object-based commands (See Murray et al. page 7, paragraph 0090);

associating each individual object-based command with at least one execution element (See Murray et al. page 6, paragraph 0085).

Murray et al. does not teach executing each execution element associated with each individual object-based command to produce output objects, wherein the execution of each execution element is execution dependent upon an execution-supporting operating environment.

Whereas, in the same field of endeavor, Young discloses a data processing system including a transaction processor pipeline made up of a number of pipeline stage (sub-component) and a parser for parsing data object; executing each execution element associated with each individual object-based command to produce output objects, wherein the execution of each execution element is execution dependent upon an execution-supporting operating environment (FIG. 2-3; col. 7, lines 15-61).

It would be obvious to one having ordinary skill in the art at the time the invention was made to modify Murray et al.'s invention with Young's invention to include a pipeline objects executed in different stage as sub-component for data processing. One would have been motivated to provide include such feature in order to provide a flexible, distributed system for performing calculations defined (Young's col. 8, lines 48-55).

The combination of Murray et al. and Young still does not teach resolving each object-based command in the sequence of object-based commands to a data type; and

for data types that are not natively supported by the operating environment, retrieving extended information that defines the data types and creating an instance of the data types for each object-based command in the sequence that was resolved to one of the data types.

Kirens teaches resolving each object-based command in the sequence of object-based commands to a data type (See Kirens column 15, lines 34-36, and see column 12, lines 56-60, and column 16, lines 11-19); and

for data types that are not natively supported by the operating environment, retrieving extended information that defines the data types and creating an instance of the data types for each object-based command in the sequence that was resolved to one of the data types (See Kirens column 15, lines 21-26, and see column 15, lines 42-45, wherein "user defined types" are non-native to operating environment).

It would be obvious to one having ordinary skill in the art at the time the invention was made to further modify Murray et al. as modified with the teachings of Kirens's invention to include resolving each object-based command in the sequence of object-based commands to a data type; and for data types that are not natively supported by the operating environment, retrieving extended information that defines the data types and creating an instance of the data types for each object-based command in the sequence that was resolved to one of the data types

because it would introduce and accommodate further newly discovered data types relative efficiently to reduce the execution time.

As to claims 2, and 20, Murray et al. as modified discloses wherein the executing act comprises processing each execution element in order of each execution element's associated individual object-based commands in the sequence of object based commands (See Murray et al. page 6, paragraph 0087, and see Kirens column 20, lines 52-56).

As to claims 3, and 21, Murray et al. as modified discloses wherein the executing act further comprises inputting into one or more execution elements output objects produced from one or more previously processed execution elements (See Murray et al. page 5, paragraph 0067, and see Murray et al. page 6, paragraph 0076, and see Young FIG. 2-3; Young col. 7, lines 15-61).

As to claims 4, 16, and 22, Murray et al. as modified discloses wherein the extended information comprises extended metadata and code, the extended metadata describes the data type and the code comprises additional instructions to populate the instance of the data type (See Murray et al. page 6, paragraph 0082, wherein "attributes" are read on "metadata").

As to claim 5, Murray et al. as modified discloses comprising receiving the sequence of object-based commands via an object-based command pipeline (See Young column 7, lines 16-44, and see Young column 8, lines 1-10), wherein the sequence of object-based commands includes a wildcard and the processing further comprises producing a subset of the sequence of object-based commands based on the wildcard (See Murray et al. page 5, paragraph 0069,

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wherein it is inherent in any command language that character representing wildcard is accepted).

As to claim 6, Murray et al. as modified discloses further comprising receiving the sequence of object-based commands via an object-based command pipeline (See Young column 7, lines 16-44, and see Young column 8, lines 1-10), wherein the sequence of object-based commands includes a property set and the processing further comprises identifying a plurality of properties associated with the property set and processing the sequence of object-based commands based on the plurality of properties (See Murray et al. page 7, paragraph 0090).

As to claim 7, Murray et al. as modified discloses comprising receiving the sequence of object-based commands via an object-based command pipeline (See Young column 7, lines 16-44, and see Young column 8, lines 1-10), wherein the sequence of object-based commands includes a relation and the processing further comprises finding items that the sequence of object-based commands consume based on the relation (See Young column 7, lines 48-61, also see Murray et al. page 7, paragraph 0096, lines 16-20, wherein “sequential” is taught).

As to claim 8, Murray et al. as modified discloses further comprising receiving the sequence of object via an object-based command pipeline (See Young column 7, lines 16-44, and see Young column 8, lines 1-10), wherein the sequence of object-based commands comprises a property path, the property path comprises a series of components that provide navigation to a desired property of each object -based command in the sequence (See Murray et al. page 7,

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paragraph 0092, also see Murray et al. page 7, paragraph 0096, lines 16-20, wherein “sequential” is taught).

As to claims 9, and 23, Murray et al. as modified discloses wherein the sequence of object-based commands is associated with a first data type and the processing further comprising looking up a conversion for converting the first data type to the data type (See Murray et al. page 5, paragraph 0067, and see Murray et al. page 6, paragraph 0076).

As to claim 10, Murray et al. as modified discloses wherein each component comprises a property of each object-based command in the sequence, a method of each object-based command in the sequence, a field of each object-based command in the sequence, a third party property, or a third party object method (See Young column 8, lines 48-64).

As to claim 11, Murray et al. as modified discloses wherein the sequence of object-based is received as input to a subsequent command in the object-based command pipeline after processing the sequence of object-based commands (See Young column 7, lines 16-44, and see Young column 8, lines 1-10).

As to claim 13, Murray et al. as modified discloses wherein a component comprises a reference to registered code (See Murray et al. page 4, paragraph 0055).

As to claim 14, Murray et al. discloses a computer storage medium for facilitating resolution of partially unresolved input, the medium having computer executable instructions, which when executed by a computer perform operations comprising:

receiving one or more parseable input objects (See Murray et al. page 7, paragraph 0090), the input objects being output from an already processed execution element that is associated with one or more object-based commands of a sequence of commands obtained within an execution-supporting operating environment, wherein the execution of an execution element is execution dependent upon the execution-supporting operating environment in order to actually execute (See Murray et al. page 6, paragraphs 0086-0087);

retrieving extended information that defines the data type (See Murray et al. page 6, paragraph 0076); and

creating an instance of the data type (See Murray et al. page 5, paragraph 0069), wherein the receiving, retrieving, and creating acts facilitate resolution of partially unresolved input.

Murray et al. discloses the claimed invention but does not explicitly teach via an object-based command pipeline.

Whereas, in the same field of endeavor, Younq discloses a data processing system including a transaction processor pipeline made up of a number of pipeline stage (sub-component) and a parser for parsing data object; and sending, with the method associated with a first pipeline sub-component, the at least one object to a next pipeline sub-component for processing, the next pipeline sub-component being one of the plurality of pipeline sub-components; and outputting information from at least one of the plurality of pipeline sub-

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components, the information is the result of at least a portion of the processing performed by the object based pipeline (FIG. 2-3; col. 7, lines 15-61).

It would be obvious to one having ordinary skill in the art at the time the invention was made to modify Murray et al.'s invention with Young's invention to include a pipeline objects executed in different stage as sub-component for data processing. One would have been motivated to provide include such feature in order to provide a flexible, distributed system for performing calculations defined (Young's col. 8, lines 48-55).

The combination of Murray et al.'s invention with Young's still does not teach the one or more parseable input objects including content that uses a data type that is not natively supported by the execution-supporting operating environment.

Kirens teaches the one or more parseable input objects including content that uses a data type that is not natively supported by the execution-supporting operating environment (See Kirens column 15, lines 21-26, and see column 15, lines 42-45, wherein "user defined types" are non-native to operating environment).

It would be obvious to one having ordinary skill in the art at the time the invention was made to further modify Murray et al. as modified with the teachings of Kirens's invention to include the one or more parseable input objects including content that uses a data type that is not natively supported by the execution-supporting operating environment because it would introduce and accommodate further newly discovered data types relative efficiently to reduce the execution time.

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As to claim 15, Murray et al. as modified discloses wherein the one or more parseable input objects comprises a Windows Management Instrumentation (WMI) input, an ActiveX Data Object (ADO) input, an XML input, or a third party data format (See Murray et al. page 6, paragraph 0077).

As to claim 15, Murray et al. as modified discloses wherein the one or more parseable input objects comprises a third party object that provides an additional property to an object supported natively within the execution-supporting operating environment (See Murray et al. page 5, paragraph 0064, and see Murray et al. page 6, paragraph 0079).

As to claim 18, Murray et al. as modified discloses wherein the one or more parseable input comprises an ontology service (See Murray et al. page 3, paragraph 0027, and see Murray et al. page 6, paragraph 0079, wherein “ontology” reads on “grammar”).

Response to Arguments

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074.

The examiner can normally be reached on 8:30AM-5: 30PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neveen Abel-Jalil
Primary Examiner
November 9, 2008
/Neveen Abel-Jalil/

Examiner, Art Unit 2165